

CLAIMS

What is claimed is:

- 1 1. A scanning method, comprising:
 - 2 a) receiving data at a network element;
 - 3 b) identifying a load on the network element; and
 - 4 c) conditionally scanning the data at the network element based on the load
 - 5 on the network element.
- 1 2. The method as recited in claim 1, wherein the network element includes a
2 gateway.
- 1 3. The method as recited in claim 1, wherein the load includes a backlog of
2 data to be scanned at the network element.
- 1 4. The method as recited in claim 1, wherein an amount of scanning
2 completed at the network element is a function of the load on the network
3 element.
- 1 5. The method as recited in claim 4, wherein the data is partially scanned at
2 the network element if the load on the network element is greater than a
3 predetermined amount.
- 1 6. The method as recited in claim 5, wherein the data is completely scanned
2 at the network element if the load on the network element is less than the
3 predetermined amount.
- 1 7. The method as recited in claim 1, and further comprising storing a status
2 of the scanning at the network element.

1 8. The method as recited in claim 7, wherein an additional network element
2 conditionally scans the data based on the status.

1 9. The method as recited in claim 8, wherein the additional network element
2 includes a server.

1 10. A computer program product for scanning, comprising:
2 a) computer code for receiving data at a network element;
3 b) computer code for identifying a current load on the network element; and
4 c) computer code for conditionally scanning the data at the network element
5 based on the load on the network element.

1 11. A scanning system, comprising:
2 a) logic for receiving data at a network element;
3 b) logic for identifying a current load on the network element; and
4 c) logic for conditionally scanning the data at the network element based on
5 the load on the network element.

1 12. A scanning method, comprising:
2 a) receiving data at a network element;
3 b) determining whether there is a request for the data;
4 c) conditionally scanning the data at the network element based on whether
5 there is a request for the data; and
6 d) transmitting the data in response to the request.

1 13. The method as recited in claim 12, wherein the network element includes
2 a server.

1 14. The method as recited in claim 12, wherein the request for the data is
2 received from a user device.

00000000000000000000000000000000

- 1 15. The method as recited in claim 12, wherein the data is partially scanned at
2 the network element if it is determined that there is a request for the data.
- 1 16. The method as recited in claim 15, wherein the data is completely scanned
2 at the network element if it is determined that there is not a request for the
3 data.
- 1 17. The method as recited in claim 12, and further comprising storing a status
2 of the scanning at the network element.
- 1 18. The method as recited in claim 17, wherein an additional network element
2 conditionally scans the data based on the status.
- 1 19. A computer program product for scanning, comprising:
2 a) computer code for receiving data at a network element;
3 b) computer code for determining whether there is a request for the data;
4 c) computer code for conditionally scanning the data at the network element
5 based on whether there is a request for the data; and
6 d) computer code for transmitting the data in response to the request.
- 1 20. A scanning system, comprising:
2 a) logic for receiving data at a network element;
3 b) logic for determining whether there is a request for the data;
4 c) logic for conditionally scanning the data at the network element based on
5 whether there is a request for the data; and
6 d) logic for transmitting the data in response to the request.
- 1 21. A scanning method, comprising:
2 a) receiving data at a network element;

09625595 - DE2014

- 3 b) determining an extent to which the data was previously scanned by
4 another network element;
5 c) conditionally scanning the data at the network element based on the extent
6 to which the data was previously scanned by another network element.
- 1 22. The method as recited in claim 21, wherein the network element includes
2 a user device.
- 1 23. The method as recited in claim 21, wherein an amount of scanning
2 completed at the network element is a function of the extent to which the
3 data was previously scanned by another network element.
- 1 24. The method as recited in claim 23, wherein an amount of scanning
2 completed at the network element is sufficient to complete an entirety of
3 the scanning.
- 1 25. The method as recited in claim 23, wherein the extent to which the data
2 was previously scanned by another network element is identified in a log
3 accessible by the network element.
- 1 26. The method as recited in claim 21, and further comprising storing a status
2 of the scanning at the network element.
- 1 27. The method as recited in claim 26, wherein an additional network element
2 conditionally scans the data based on the status.
- 1 28. A computer program product for scanning, comprising:
2 a) computer code for receiving data at a network element;
3 b) computer code for determining an extent to which the data was previously
4 scanned by another network element;

106290 664525

- 5 c) computer code for conditionally scanning the data at the network element
6 based on the extent to which the data was previously scanned by another
7 network element.
- 1 29. A scanning system, comprising:
2 a) logic for receiving data at a network element;
3 b) logic for determining an extent to which the data was previously scanned
4 by another network element;
5 c) logic for conditionally scanning the data at the network element based on
6 the extent to which the data was previously scanned by another network
7 element.
- 1 30. A method for efficient scanning, comprising:
2 a) receiving data from a network at a gateway coupled between a network
3 and at least one data server;
4 b) identifying a backlog of data to be scanned in the gateway;
5 c) if the backlog is greater than a predetermined amount, performing a partial
6 scan utilizing a gateway scanner at the gateway;
7 d) if the backlog is less than the predetermined amount, performing a
8 complete scan utilizing the gateway scanner at the gateway;
9 e) storing a first status of the scanning performed utilizing the gateway
10 scanner in a database coupled to the gateway scanner;
11 f) passing the data from the gateway scanner to the data server coupled
12 thereto;
13 g) reading the first status from the database utilizing a data server scanner at
14 the data server;
15 h) determining whether there is a request for the data from at least one user
16 device coupled to the data server;
17 i) if it is determined that there is a request for the data from the user device,
18 performing a partial scan on the data;

- 19 j) storing a second status of the scanning performed utilizing the data server
20 scanner in the database which is coupled thereto;
- 21 k) transmitting the data to the user device;
- 22 l) reading the second status from the database utilizing a user device scanner
23 at the user device;
- 24 m) determining whether the scanning of the data is complete based on the
25 first status and the second status; and
- 26 n) if it is determined that the scanning of the data is not complete,
27 completing the scanning of the data utilizing the user device scanner at the
28 user device.
- 1 31. The method as recited in claim 30, and further comprising storing a third
2 status of the scanning performed utilizing the user device scanner in the
3 database which is coupled thereto.

10295495.1